A NEW FAMILY OF PARASITIC HYMENOPTERA.

By J. C. Crawford.

(Plate V.)

VANHORNIIDÆ, new family.

Type—The following new genus and species:

VANHORNIA, new genus.

Antennæ 13-jointed in both sexes, inserted just above the clypeus; mandibles broad, with three teeth on the outer side, the mandibles working away from each other, when closed widely separated; vertex very high, the top of the eyes about one-half the distance from mouth-parts to vertex; ocelli arranged in a triangle, the lateral ones on a level with the top of the eyes; prothorax narrow, the lateral angles reaching the tegulæ; the neck of the thorax rather long; parapsidal furrows distinct; postscutellum separated from the metathorax (the true first segment of the abdomen) by a furrow; the trochanters show only one segment in both sexes; venation very similar to the genus *Helorus;* the basal nervure complete, extending forward to the subcostal nervure; abdomen sessile, the dorsum in the female showing two distinct segments, in the male three, due to the complete fusing of the first three segments; venter chitinized; ovipositor exserted; the venter grooved for its reception, since when the second segment of the abdomen is closed over the venter it forces the ovipositor to be directed forward along the ventral surface.

This genus is named for Mr. R. W. Van Horn, who discovered it.

Vanhornia eucnemidarum, new species.

Female: Length 6 mm. Black, sparsely punctured, each puncture bearing a short, light-colored hair; antennæ brown, the first two joints more reddish, scape and pedicel short, first joint of funicle almost as long as the three following; head sparsely, finely punctured, punctures closer along lower end of anterior orbits; prothorax rugoso-punctate; mesothorax finely sparsely punctured; parapsidal furrows formed by rows of pits; scutellum at base and apex with a row of large pits; postscutellum coarsely rugose and with a median longitudinal carina; metathorax rugose, truncate, the truncation separated from the pleuræ by a carina, which above joins a carina running to the base of metathorax; abdomen truncate at base, the truncation carinate, lateral angles produced; abdomen finely, sparsely punctured in certain lights; the points of fusion of segments 1 to 3 can be seen; segment 1 (1 to 3 combined) with longitudinal striæ extending about one-third of dis-

tance to apex and with a median longitudinal carina extending two-thirds of the distance; ovipositor about 4 mm. long.

Male: Length 6 mm. Similar to the female.

Secured from the cells of larvæ of the family Eucnemidæ.

Type locality: Female, Silver Spring, Md.; male, Lynnhaven, Va. Both collected by Mr. R. W. Van Horn. Paratype female, Plummer's Island, Md., May 31, 1908, E. A. Schwarz, collector; paratype male, Silver Spring, Md., Van Horn, collector.

Type—No. 12584 U. S. National Museum.

Explanation of Plate V.

Vanhornia eucnemidarum Crawford.

1. Adult female.
2. Head of female.
3. Abdomen of female.

—On behalf of the author, Professor Webster read the following paper:

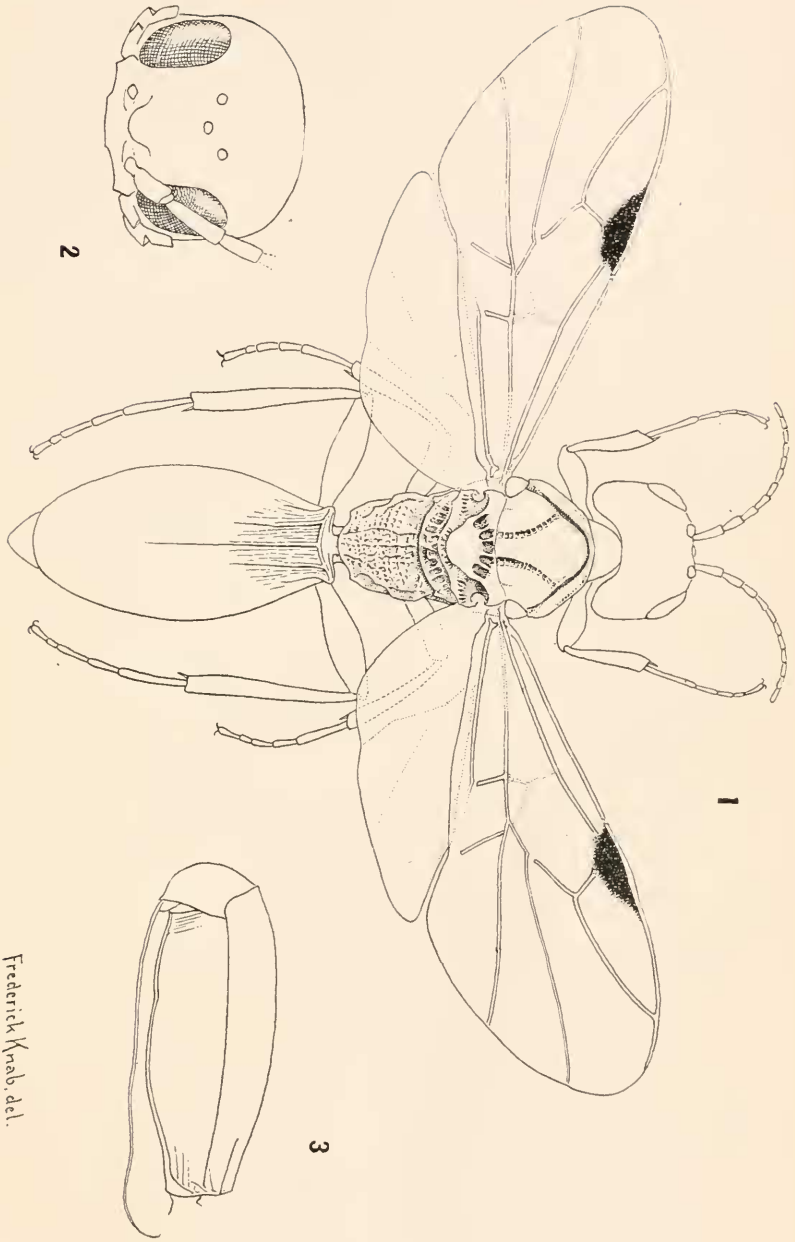
HOW LYSIPHLEBUS FASTENS ITS APHID HOST TO THE PLANT.

[Hymenoptera, Braconidæ.]

By E. O. G. Kelly.

During the fall of 1908, in connection with his investigations of *Toxoptera graminum,* the writer carefully bred and reared several hundred parasites belonging to the genus *Lysiphlebus* Foerster.

In order that some careful interbreeding could be done, individual aphids, upon turning brown (caused by the parasites), were removed from the host plant to small homeopathic vials stoppered with cotton, in which the adult *Lysiphlebus* emerged. In removing these brown aphids from the plant they were observed to be securely fastened to it by silken threads enmassed in a glutinous substance which had become dry and hard. The glutinous substance and silk are more or less brittle and numbers of cocoons (as they really are cocoons) were broken open on the ventral side at the point of attachment, while being removed from the plant. The breaking open of the cocoon was nearly always fatal to the parasite, in fact, it proved to be inconveniently so; consequently another



VANHORNIA EUCNEMIDARUM CRAWFORD